

Illustration of an 1857 “sea-serpent” sighting re-interpreted as an early depiction of cetacean entanglement in maritime debris

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ABSTRACT: As many sightings of purported sea-serpents are now recognized to have been misidentified cetaceans, this anecdotal literature can provide a valuable resource for extending inferences about whale biology backward in time. For example, a re-interpretation of the 1857 sighting of a “sea-serpent” seen off Cape Town suggests that the unidentified marine object was probably an animal, likely a cetacean, observed entangled in fishing gear or other maritime debris. This is one of the earliest cases of pre-plastic entanglement, and suggests the problem has a much longer environmental history than what is commonly believed.

KEYWORDS: cryptozoology – South Atlantic ocean – whales – Cape Town – monsters.

INTRODUCTION

Published at a time when television audiences around the world were first being enraptured by Jacques Cousteau’s compelling documentaries, *A pictorial history of sea monsters and other dangerous marine life* (Sweeney 1972) was a “coffee-table book”, designed to appeal to readers interested in the frightening prospect of denizens of the deep. Richly illustrated with almost four hundred drawings, paintings and photographs, Sweeney’s tome reviewed the visualization of sea-serpents from early mythology, through the sixteenth-century “HIC SVNT DRACONES” (“here are dragons”) maps, into the modern age. And as would be expected, included therein were many illustrations, some by artists of renown such as Gutave Doré, of fantastical creatures seemingly ripped from the pages of novels by Edgar Rice Burroughs or Jules Verne. Amidst these representations of menacing monsters locked in battle with tall ships or threatening shore-bound onlookers was a small, apparently innocuous drawing (Figure 1). Unattributed to any specific sighting, it was placed at the bottom of a page in the chapter “1850 to 1900” (Sweeney 1972: 88) and seems to be related to a proximal paragraph of text about sea-serpents in the nineteenth century, being given the scientific name *Lineus longissimus*, which is actually that for the Bootlace Worm, and which at over 50 metres, is the longest animal known. The reason suggested by Sweeney (1972: 87–88) for this adopted nomenclature is thought to have been science’s attempt to “apply this catchall term in order to purge itself of any association with illusion.” I became interested in determining the source of this particular sketch, which, given its amateurish penmanship, I assumed to have been made by an eyewitness to the actual sighting, for the very reason that it was so remarkably incongruous to the other, professionally rendered illustrations of overwrought artistic imagination that subsumed the rest of the book.

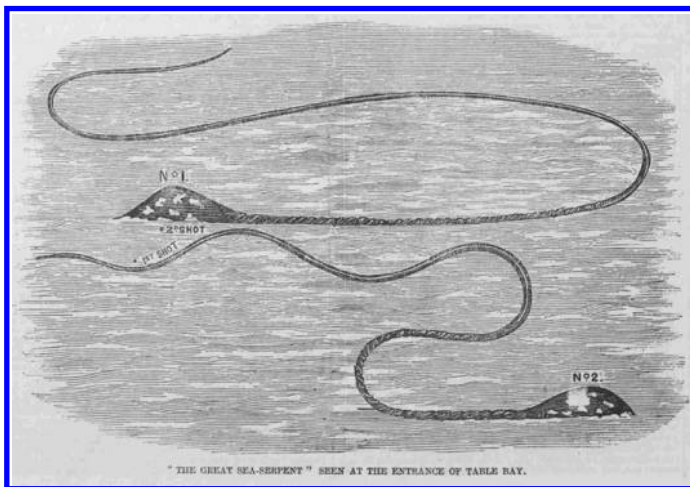


Figure 1. A purported sea-serpent, or simply an unidentified, surface-swimming and presumed air-breathing, marine mammal entangled and trailing a long rope of maritime debris? *Illustrated London news* 13 June 1857, p. 570 (reprinted in the *Strand magazine* August 1895; Oudemans 1892: 236; Heuvelmans 1968: 243).

ACCOUNT

It turns out that the figure comes from a sighting that occurred on 16 February 1857 overlooking Table Bay, Cape Town, and was witnessed by Dr François Biccard and seven others. Biccard sent the sketch and brief description of the encounter to a friend, Charles A. Fairbridge, who had it published in a local newspaper, the *Cape Argus*, on 14 March 1857. Biccard's letter and illustration were subsequently reprinted in the *Illustrated London news*, the world's first illustrated weekly news magazine, wherein many accounts and illustrations of sea-serpent sightings were published to satisfy a global appetite for such. The following description by Biccard (1857: 570–571) explained some details of the sketch:

... I was called by Mr. Murray, the lighthouse-keeper, to "come and see a sea monster." I proceeded to the lighthouse, and from thence I saw on the water, about 150 yards from the shore, the serpent It was lying in the position shown in the accompanying Sketch No 1. I borrowed a rifle from Mr. Hall (Mr. Murray's father-in-law), and fired at the animal. The ball fell short in front of it by about four yards, as shown in the sketch. The animal did not move, and I then fired a second shot, the ball striking about a foot and a half from it. The serpent, then apparently startled, moved from his position, straightened himself out, and went under water, evidently getting out of the way. He was invisible for about ten minutes, at the expiration of which interval he reappeared at about two hundred yards distance, and I should say about forty yards further off. He then came right on towards the place where I first saw him Upon reaching the place he had first occupied, the serpent formed himself into the position delineated in Sketch No 2. He then stood right into the bay, and soon afterwards we lost sight of him altogether.

... its length was about 200 feet, but its thickness I cannot tell, the upper part of the body only being visible. The head could be seen but indistinctly, as he raised it at intervals, as shown in the sketch. I consider the protuberance to be the upper part of the head, but I could not discover the eyes, notwithstanding the short distance, and the telescope, which was a pretty good one. The colour of the animal was a dark dull colour, except the head, which was maculated with large white spots.

Biccard's account and illustration were republished in the immensely popular *Strand magazine* in 1895. However, the somewhat unexciting description and unassuming

illustration relative to other singular and therefore much more famous encounters with unidentified marine objects (UMOs), such as the Egede, Gloucester Harbor, *Daedalus*, *Osborne*, *Valhalla* and “Soay beast” sightings (all of which, incidentally, have had non-sea-serpent-related explanations posited (Brongersma 1968; Paxton *et al.* 2005; Galbreath 2015; France 2017)), meant that only occasionally would the Cape Town UMO be mentioned in subsequent publications about sea-serpents.

INTERPRETATIONS

And so what is to be made of this intriguing illustration and its accompanying description? I would propose that from Biccard’s sketch it appears that what Biccard considered to be the eyeless “head” of the creature might be better interpreted as being the bulk of the body, the real head being submerged at the times shown in the two drawings. Given this assumption, it is not unreasonable to liken the two “protuberances” to the humped back of a cetacean engaged in rising up and down to alternatively breathe and feed. Many whales are encrusted with barnacles which from a distance do resemble the “large white spots” shown in the sketch and noted in the description. But then there is the mystery of the long extension of the sea-serpent, an obvious tail, which, though oddly not mentioned in the account, is clearly the most compelling feature shown in the sketch, and which, significantly, is not characteristic for any species of cetacean. From the illustration the tail appears to be very thin and extremely flexible, capable of twisting upon itself in tight curves. Also, the junction of the tail to the body is quite marked, in both cases shown by a sharp discontinuity of form. The body is smooth whereas the start of the tail is definitely annelated, resembling a section of twisted rope. Further along its length, the tail loses its segmented form and becomes smooth with alternating dark and light colouration.

In the field of sea-serpent scholarship two seminal works stand out above all others for their comprehensive compilation of sightings: Oudemans’s *The great sea-serpent: an historical and critical treatise* (1892), and Heuvelmans’s *In the wake of the sea-serpents* (1968). Indeed, these two books are largely responsible for popularizing the field now known as marine cryptozoology. Both are commendable for their historical documentation of sea-serpent sightings from the period when many of the world’s leading naturalists considered the study of such to be both a legitimate and a meritorious field of scholarship (Brown 1990; Lyons 2009; Regal 2012). However, both also suffer from displaying occasionally egregious confirmation bias as well as the implicit failure to employ parsimonious explanations (that is, Occam’s razor) for the UMOs, that are sometimes debilitating characteristics of the pseudoscience of cryptozoology (Dendle 2006; Loxton and Prothero 2013). Nevertheless, in terms of attempting to understand what is actually being portrayed in Biccard’s sketch (Figure 1), it turns out to be useful to examine the opinions of these two experts.

This Cape Town sighting is one of the few that Oudemans (1892) made no attempt to forcibly fit into his pet theory that all sea monsters represent a type of long-necked palaeo-seal. He complimented Biccard on producing an illustration that closely matched his text, it being “pretty well done for one who cannot draw.” He noted, however, that “nobody can help laughing when he sees this figure, representing something very much like a black buoy, with white streaks and spots, and glittering in the sun, having a long rope attached to it!” The mottling was due, Oudemans suggested, to water running down following elevation

of the head into the air. Most significantly, as will be seen shortly, he remarked that the creature shown in the sketch closely matched the same "astonishing lateral flexibility" (Oudemans 1892: 237) and behaviour described previously for the sea-serpent that was observed in Gloucester Harbor, Massachusetts, around 1817.

Heuvelmans (1968: 242) was extremely brief in his interpretation of the sighting, demonstrating a degree of perceptive reasoning markedly absent from much of the rest of his tome:

Dr. Biccard's picture shows something more like an immensely elongated tadpole or a gigantic spermatozoon than a serpent. One wonders why he called the only substantial part of it a 'head', when it looks more like a 'body', and the long twisted tail, that looks nothing so much as a floating length of coir rope, the 'body'. This so-called body is so unlike any part of an animal that one cannot help thinking that it may have been a net or rope towed by a shark or porpoise which had got caught in it and whose wounded body appeared to be what the doctor called the head.

With that concluding sentence, I believe, Heuvelmans hit the mark in correctly interpreting this particular UMO sighting. In so doing, he was prescient of what today is commonly regarded as being one of the most serious problems in marine conservation biology, but which, in the 1960s, went unrecognized.

DISCUSSION

Entanglement in marine debris and both active and abandoned ("ghost") fishing gear is a serious environmental problem affecting the survival of more than two hundred species of marine animals (Laist 1997). Entanglement need not result in immediate death from drowning, but can be a long-term disability due to impaired swimming and feeding, and infection from abrasion wounds (Derraik 2002). Importantly, entanglement is widely believed to be a modern phenomenon related to the advent and widespread use of non-degradable plastic in the middle of the twentieth century (Wabnitz and Nichols 2010), with little or no occurrence before that time (NOAA 2014), due to the assumption that materials made from hemp and other natural fibres will "lose their resilience in usage and if lost or discarded at sea [will] tend to disintegrate quickly" (Gregory 2009). Because of this, it was only in the mid 1980s that scientists came to recognize the severity of the problem of marine debris and its implications for wildlife conservation. Indeed, a literature search (Vegter *et al.* 2014) revealed only a single publication on the subject issued before 1970, which, it should be noted, was after Heuvelmans raised the possibility of entanglement being the explanation behind Biccard's sketch. This was the first noteworthy finding from the present historical investigation. That it was a "fringe" cryptozoologist and not a "real" marine biologist who first posited, in a 1960s publication, based on his examination of the sketch, that marine animals could be susceptible to becoming entangled in fishing gear and be "wounded" in the process, will no doubt be a little unsettling for some scientific purists.

Compared to modern ropes which are almost exclusively made of nylon or polyethylene, it is true that earlier ropes made from natural fibres will have deteriorated more rapidly. But it would be erroneous to suppose that such material, in order to be of sufficient durability for continued widespread maritime use over a period of centuries¹ (Aiken and Purser 1936), would not have lasted long enough to pose a threat for entangling susceptible wildlife. Furthermore, a careful parsing of the words and an examination of the accompanying illustrations in accounts of what were thought to have been sea-serpents locked in mortal

combat with whales (France 2016a), or strange snake-turtle hybrid creatures (France 2016b, 2017), suggests that entanglement did occur during the nineteenth century. This was the second noteworthy, but also the most important, finding from the present historical investigation. Populations of marine animals in the Anthropocene have therefore been subjected to pressure not only from direct fishery exploitation (Lotze and Worm 2009), but also possibly from being by-catch due to entanglement in that deployed gear, for a much longer period than what is commonly presumed.

Today, it is possible to go online and find hundreds of disturbing photographs of unfortunate marine animals pulling long trains of all manner of entangled debris behind them (for some specific sources see France 2017). In like fashion, I believe that the UMO portrayed in Biccard’s sketch (Figure 1) represents one of the earliest depictions of an animal, probably a cetacean, entangled in maritime debris. Alternatively, the “tail” of the Cape Town UMO may represent the legacy of an encounter with the rapacious nineteenth-century whaling industry. Not all harpooned whales are captured (Gardner 2007). Indeed, up to a quarter of all that are struck may actually escape (Hoare 2010), such as the whale that made off pulling two lines with affixed wooden cask floats from the noted explorer Fridtjof Nansen (Mowat 1997; France 2016a).

There are two lines of evidence to support my conclusion. First, the length reported by Biccard for the UMO of “200 feet” is clearly impossible, given that it is twice that for blue whales, the largest vertebrate ever known to have existed. Obviously then, the composition of what was presumed to be the tail must be something extra; in other words, an inanimate object that is affixed to the hump-shaped body of the creature in front. Second, that Oudemans (1892) drew parallels for both the “astonishing” flexibility of the presumed tail and the swimming behaviour of the Cape Town and Gloucester UMOs is itself significant. This is because the Gloucester Harbor encounter represents the most sighted and studied sea-serpent in history (Brown 1990; Soini 2010). It was also one that was almost certainly an animal pulling a length of entangled fishing floats, to which the “tail” was specifically likened in more than a dozen eyewitness descriptions (see France 2016a).

It is my belief that a not insubstantial proportion of all sea-serpent sightings, specifically those UMOs described as being “multi-humped”, may represent animals entangled in fishing gear or other maritime debris. These misconstruings went unrecognized at the time, with a notable exception included in Oudemans’s (1892) listing of possible explanations. This encounter with a fishing net occurred in 1860 off the coast of China (Oudemans 1892: 350):

There was little wind, and the gentle ripples covered the surface of the sea . . . [when] my eye rested on a long dark object apparently making its way steadily through the water. After observing it some time in silence I was sorely puzzled and could make nothing of it. It was neither a seal nor a diver nor a fishing cormorant, for with their forms I was familiar; so I went on deck and consulted other eyes than mine. Sundry glasses were brought to bear on the suspicious object, and the general scrutiny seemed to decide that it was a large snake, about ten feet long (or much longer according to some), working its way vigorously against the tide by lateral undulations of the body. So strong was this conviction that the course of the ship was altered, and a boat got ready for lowering. With a couple of loaded revolvers, some boathooks and a fathom or so lead-line, I made ready for the encounter, intending to range up alongside, shoot the reptile through the head, make him fast by a clove-hitch, and tow him on board in triumph! By this time, however, a closer and more critical inspection had taken place, and the supposed sea-monster turned himself into a long dark root, gnarled and twisted, of a tree, secured to [that is, entangled in] the moorings of a fishing net, with the strong tide passing it rapidly, and thus giving it an apparent life-like movement and serpentine aspect.

Marine environmental historians have resorted to imaginative means in which to back-cast the temporal frame of reference from which to detect recent anthropogenic change.

Some of these approaches are visually based, such as the use of photographs to show declines in the size of trophy fishes or the pre-photography, camera obscura paintings of Canaletto to gauge the subsidence of Venice (McClenachan 2009; Camuffo 2001). The present study, in support of other examples documented in France (2016a, 2016b, 2017), indicates that the illustrations accompanying anecdotal accounts of purported sightings of sea-serpents provide data (*sensu* Paxton 2009) which can serve as a valuable resource for extending inferences about marine environmental issues backward in time. Bolster (2012) was therefore correct in his assertion that “no marine environmental historian worth his or her salt can afford to ignore . . . nineteenth-century sea-serpents.”

NOTE

¹ J. McCaskill, 2009 “Conserving waterlogged rope: a review of traditional methods and experimental research with polyethylene glycol.” MA thesis, Texas A&M University, College Station.

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